

THURSDAY, OCTOBER 3, 1918

Eight Months at the Front With the American Army

AMERICAN INGENUITY FIGHTING WAR WASTE.
Biggest Salvage Plant in the World, Employing Nearly 9,000 Workers, Saves \$2,000,000 a Month Through Reclamation of Army Waste at a Net Cost of Sixteen Per Cent. of Amount Saved.

By Martin Green

(Staff Correspondent of The Evening World.)

A PHILADELPHIAN named D'Oliver, joining a commission in our army, is the executive head, in a town in France, of the biggest reclamation and salvage plant in the world. He employs between 6,000 and 7,000 French women, about 1,500 mechanics and skilled tradesmen who have been inactivated from the French Army, and 400 American enlisted men, who act as his representatives in directing the work of the various departments. Before he joined the army this busy officer earned \$50,000 a year or more reorganizing crippled business concerns on behalf of banks holding mortgages or notes, and he was in the directorate of half a dozen Philadelphia banks.

A picture of his wife and children on his desk in his office is the only reminder he has of his civilian life. He hasn't had a chance to think about anything but work for the army since he landed at a French port one day, expecting to be assigned to a regiment at the front, and found that he had been picked to organize and run the business of reclaiming and repairing the numerous articles which the men of the army wear out or throw away.

He opened up in a little shed with a working staff of six French women who had worked in a French reclamation plant and knew something about how things should be done. This was in February. In May he had increased his force to 3,500 women and 500 men and was saving the Government a million dollars a month. The salvage now amounts to probably \$2,000,000 a month and saves far more important transport space for about 200 ship tons a day, which would be required but for the work of reclamation. The net cost of the work is about 15 per cent. of the amount saved.

"You have a better ordered and more efficient plant here than the British plant in the North of France," the officer was told by a visitor recently. "And the British plant has long been held up as a model."

"Is that so?" replied the ex-Philadelphia bank director. "Well, I never saw a British plant, although I know, of course, that they have several. I haven't been out of this town but once since I lit here, and on that occasion I went to Paris and put up a fight for things I needed. This concern is all American."

NO SCRAP POSSIBLE TO SAVE IS OVERLOOKED.

The reclamation plant occupies several immense buildings which were built for factory purposes, and it is being continually extended. Back to the plant from the camps and the front come the soldiers' shoes and socks and underwear, uniforms, knapsacks, blankets, cartridge belts, mess kits, campaign hats and caps, rubber boots and slickers, overcoats—everything the soldier wears or uses. Harness, saddles and horse equipment, including old horsehoes, also come back. Tin food cans, oil cans and garbage cans find their way to the reclamation plant and are put through the process of salvage. Up to June this plant also handled disabled and ordnance generally, including shell cases, but all ordnance is now salvaged at another plant, which was completed and put into operation in July.

The stuff comes in by the trainload, all mixed up. In one carlet received the day I visited the plant were everything in the way of uniforms, several hundred rifles, every sort of horse equipment, some ordnance, a woman's powder puff box, two corsets, several bugles, a parlor organ, a typewriter, a French farm-house, several disabled talking machines and a couple of dilapidated baby carriages.

The cars are unloaded at long platforms where 300 women sorters work night separating the various elements and wheeling them to sections from which they can be most expeditiously moved through the processes of reclamation. The operations are conducted with close attention to the most advanced American factory time and labor saving systems. There is no lost motion. The plant handles from forty to sixty carloads of material a day.

All clothing, blankets and personal equipment is placed in great rollers and steamed and subjected to terrific heat for the purpose of killing germ and insect life. Countless billions of active and immature beetles are destroyed daily. Shoes are subjected to the same treatment. After disinfection, clothing and blankets are washed and dried and expert sorters divide them into three classes, serviceable and slightly, fit to be repaired and sent back to the front line; serviceable but not slightly, fit to be repaired and passed out to soldiers working in labor units; unsightly, but repairable, fit to be dyed green and served to German prisoners.

Hundreds of uniforms come in blood stained and bullet marked. A tragedy attaches to each of these. Many of the uniforms have been slashed with knives in order to hasten the work of removing them from wounded or dead men.

SAVING OF CLOTHING EQUALS 75 PER CENT.

In one room in the plant 1,000 French women work at sewing ma-

chine skillfully repairing uniforms. Many of the women own their machines and the army pays them a franc a month for the use of them. Gradually the plant is being equipped with machines operated by electric power such as used in uniform and clothing factories in New York.

Everything that comes in is utilized in some way. About 15 per cent. of the clothing, 70 per cent. of the shoes and 20 per cent. of the rubber is sent out of the workrooms to be utilized again. Take shoes, for instance.

Shoes worn beyond hope of repair are cut up for patches and leather shoe straps. The soles are utilized for leather disks. No shoe is thrown away. Rubber boots are nearly always found susceptible of repair. New soles and heels for old rubber boots are made. Discarded canvas shoes are cut into soles.

About the saddest looking piece of wreckage that comes in is the old battered soldier's campaign hat—the kind with the tall crown and wide brim. These are not used in the field but they find their uses in the salvage plant. They are sent to a factory where slippers for hospital patients are made. The American army does not use slippers. The upper parts of the slippers are fashioned from ends cut off overcoats for the purpose of shortening them. The army, even in the originally supplied were so long they impeded the marching of the men, and as fast as possible they are being shortened at the salvage plant.

Large garbage cans and oil cans and land cans are cut up, rolled out and made into discs which are used for marking soldiers' graves. Small cans are fashioned into wash weights and sold. The American army does not use tin cans but the other armies in Europe combined and the empty cans come into the salvage plant so rapidly at times that it is a veritable mountain of them pile up along the railroad tracks.

The harness repair department is in charge of an officer who in civilian life ran a harness shop in St. Louis. He saves and sends back to the front about everything that comes to him. What that department can do to a battered old saddle is a source of amazement to soldiers who don't know what study and system have been applied to reclamation work.

HYGIENIC FEATURES NEW TO FRENCH WORKERS.

A feature about the plant which distinguishes it from the average French factory is the attention that has been paid to hygiene. The workrooms are all light and well ventilated. Clean toilet facilities with a surplus of water have been provided for the thousands of women employees. Few of the women had ever seen American toilet facilities and on the first day a long line of toilet rooms was opened for use every woman on the job knocked off work and took half a day for inspection. So proud were the women in the American plant of their toilet rooms and so widespread was their boasting that 2,000 women employed in a munitions plant close to the American camp, after satisfying themselves that the stories they had heard were true, threatened to strike unless they were granted similar conveniences, and the puzzled French officers in charge of the munitions works had to comply with the demands of their employees.

The women are paid a minimum of 5 francs to 7 francs a day, approximately \$1.50 to \$1.40. As they become skilled or develop particular ability in certain directions their pay is raised, but few ever make more than 7 francs a day, although many, judged by the excellent services they perform, are entitled to more. Our army is required to keep its pay for women pretty close to the standard set by the French, else all the French women employed in munitions works and other essential enterprises would flock to the American works for higher wages. French women working in our reclamation plant are allowed carfare, and mothers are given a small extra allowance for each child. They work forty-nine hours a week, putting in five days of nine hours each and four hours on Saturday, from 7 o'clock to 11 o'clock in the morning.

The employment of so many women under labor conditions as to health and convenience such as were dreamed of in France before the arrival of our army has had a wonderfully stimulating effect in the community in which our salvage plant and several other large war enterprises are located. Destruction at the front is indirectly through reclamation work at the rear, bringing about industrial conditions which will have beneficial effects in France after the war is over.

How an Artillery Barrage Is Laid

Panorama of a Section of the Western Battle Front Showing How American Troops Advance Behind a Creeping Barrage Which It Has Taken Weeks to Prepare.
(From a Drawing Published in the Electrical Experimenter.)

KEY TO PANORAMA: A—Advanced Artillery Observers, including "Flash Spotters" and "Range Sounders"; B—Observation Balloons; C—Aero-plane Observers; D—Telephone Line From Infantry Commanders; E—Meteorological Balloon; F—Ammunition Dumps.

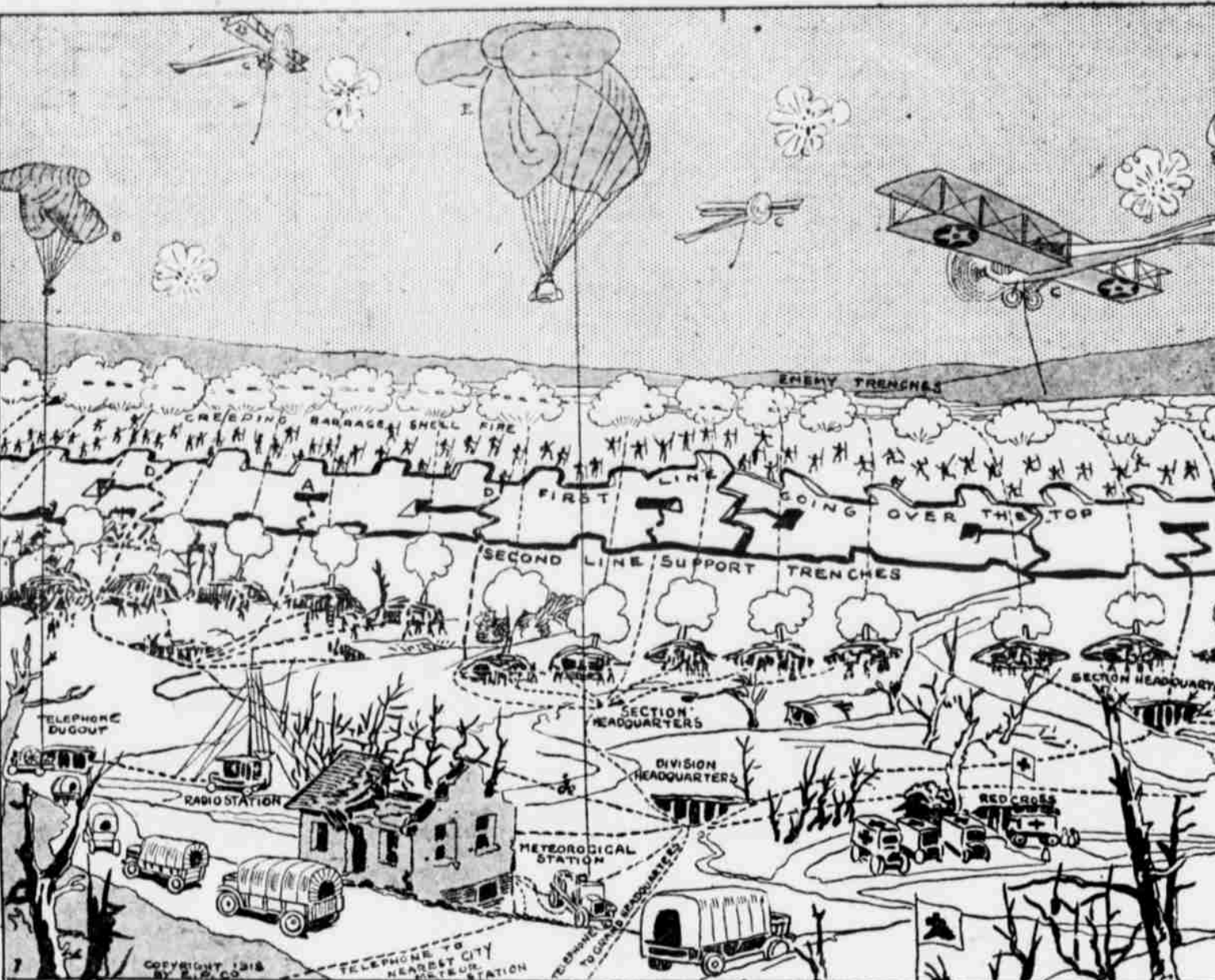
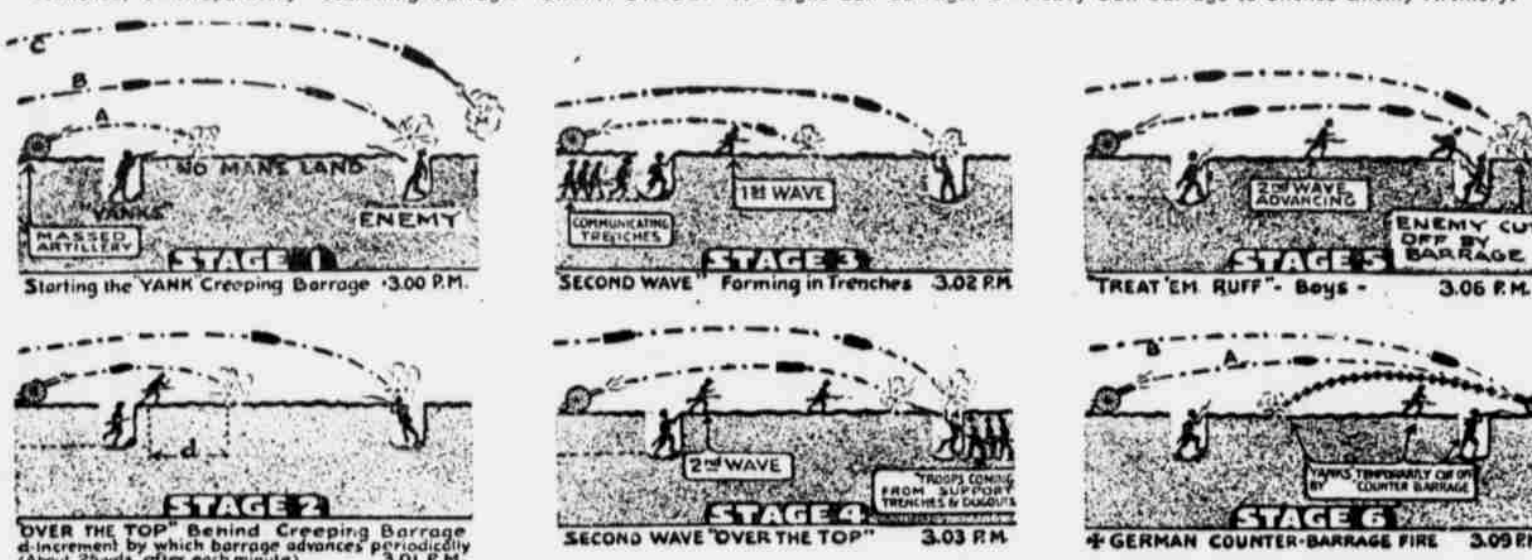


Diagram Showing Barrages Employed When We Go "Over the Top"

KEY TO DIAGRAM—FIRST STAGE: A—Light Gun Creeping Barrage Fire; B—Heavy (or light) Gun "Standing Barrage" Pounding Enemy Trenches; C—Preparatory "Searching Barrage." SIXTH STAGE: A—Light Gun Barrage; B—Heavy Gun Barrage to Silence Enemy Artillery.



NEXT to aerial warfare, the most interesting as well as important development in warfare made during the present great conflict is the artillery barrage fire, or curtain fire. It has proved a great factor in Allied advances, and is familiar to all Americans as the "escort" of our boys in going "over the top."

This new use of the artillery has made temporary structures of what were formerly impregnable trench systems. Properly handled it is irresistible. It greatly decreases losses in the assaulting forces and increases them among the defenders.

It is, properly speaking, a curtain of exploding shells laid about an enemy for preventing an advance or cutting off a retreat or to prevent the bringing up of reinforcements or supplies. For convenience such fire is divided into five kinds—"searching barrage," "standing barrage," "creeping barrage," "box barrage" and "aerial barrage."

The "searching" and "standing" barrages are in reality nothing but well known artillery "hammering" that precedes an attack. The "searching barrage" combs the entire territory to be attacked, while the "standing barrage" probably at the same time keeps up a steady fire on the enemy first and second front line trenches.

The "creeping barrage" is really the most important, scientific work of the artillery. It is a wall of bursting shells that advances a few yards ahead of the assaulting troops till it passes the objective, when it becomes a "box barrage." Here it remains between the objective and the enemy reinforcements, and at the same time a "cut-off curtain of fire" is created at each end



to prevent escape in those directions. The advancing "creeping barrage" serves all practical purposes of a screen, while the "box barrage" keeps it a sort of private fight.

These barrages require the absolute synchronization of the artillery and infantry. An artillery officer must be co-operating with the infantry. The officers of co-operating artillery and infantry must carry split-second watches exactly timed. Then a schedule of advance, that often deals with seconds of time, is carried by all officers and the advance timed by it. The "creeping barrage" starts within a few yards of the trenches holding the assaulting troops and advances a certain number of yards every minute or every certain number of seconds, the infantry following blindly per schedule.

What such perfect timing of fire means is not appreciated until one thinks that there are, perhaps, a thousand guns with many different and diversified factors entering into the firing of each. There are problems of wind velocity, humidity, temperature, fog and gun position, as well

concerned in a barrage. And yet, practically the only danger the attacking troops incur is from faulty shells that fall short or explode prematurely, or from a necessity of shifting a barrage at the sacrifice of the troops.

There is, of course, a "counter barrage" laid by the artillery of the defenders to cut off the assaulting troops and to prevent the bringing up of the second and third waves of attack.

RIMS FIT AUTOS TO RAILS.

To enable automobiles to be run on railroad tracks flanged steel rims have been invented that are attached by deflating the tires and then inflating them until they grip the rims.

The Flags of the Allied Nations

By T. L. Sanborn
No. 4—CUBA

AMONG all the world's national flags that of Cuba is unique in that it makes use of the triangle as part of its design. "La Estrella Solitaria," as the banner of the Island Republic is called, has been familiar to most Americans since the days of the Spanish-American War in 1898. It displays a large red equilateral triangle with its base resting on the staff and bearing in its center a white star, while from the triangle extend five stripes, blue at the top, then white, blue, white, and blue, in that order.



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Your "Man" Been Drafted? Try a Woman "Valette" Like Richard Bennett's

She Don't Smoke His Cigars, Can't Wear His Clothes and Aside From Some Slight Difficulties Which Have Been Solved by a Door, Is Proving Eminently Satisfactory, and May Teach Other Women How to Enter This "Profession."

By Bide Dudley

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GENTLEMEN, attention! Here's good news for you. The valet question, which undoubtedly has been troubling you sorely since the United States entered the war, has been solved.

If you want a valet who won't wear your clothes, smoke your cigars and cigarettes, drink your liquor and who won't be subject to the draft and will be on the job at all times, it is possible to have one.

Engage a woman. Richard Bennett, star of "The Unknown Purple," has one, and she is proving so eminently satisfactory that he vows he'll never have another man as long as he lives, war or no war. His valet is Mme. Alph Barreire, a Frenchwoman in her late thirties, married and the mother of four children. She likes her work and he likes the way she performs her duties.

"I'll bet," said Mr. Bennett in his dressing room at the Lyric Theatre last night, "that you're wondering why I engaged a woman. I'll tell you. First of all, competent men valets always were scarce, and now that we are in the war and England and France are too, they are almost an unknown quantity."

"I had a couple of young men, one after the other, but I discovered they were claiming their work was in the essential class and I refused to stand for slackness. I discharged them and saw to it that they were made to take up work of an essential nature. Having done this, I was complaining to Mrs. Bennett about not having a valet."

"Why not get a woman?" she asked. "Of course," she added, "you don't want a frivolous young thing. Get a sensible, middle-aged woman who understands men and will work hard."

"I liked the idea. I advertised in several of the newspapers for a woman valet and some twenty or twenty-five applicants called. I interviewed every sort of female from washerwoman to matinee girl. The right one was not among them. Miss Helen MacKellar, of our play's cast, was being instructed in French by a girl of eighteen. She said her mother would like to work for me. I took a chance and brought the mother, Mme. Barreire, from Montreal, where she was living with two minor sons. She filled the bill at once and my problem was solved."

"But," was suggested, "there are certain duties a man valet performs for his employer that appear to be out of the question where the valet is a woman."

"I know—you mean in connection with dressing me. I'll tell you how I handle that. I step in my closet and call for my underwear, sticking my hand through a crack in the doorway. Mme. Barreire gives the articles to me. Then I ask for my trousers and get them, and so it goes. She invariably knows where everything is and has it ready for me when I call."

"Do you speak French?" "Very little, and she doesn't speak English. However, I have a smattering of her language, and this, aided by signs, makes everything all right. She is exactly like a man's housekeeper would be. And she is more



"I step into my closet and reach my hand through a crack in the door."

Right Here in New York

SPANISH INFLUENZA.
By Hazel V. Carter.

KER-CHOO! A man hung on a subway strap yesterday morning—when isn't any news. The man hung on a subway strap every morning—even as you and I. And also every evening. Ditto.

But yesterday morning the strap-hanger sneezed—a loud and Spanish Influenza sneeze. And right away the whole carful of strap-hangers took notice. It was a handkerchief-less sneeze of the variety which the Board of Health calls a germ-gyrating sneeze. The straps on each side of the Influenza suspect became vacant.

Unsuspecting, the suspect read three more lines of Sport Speculation and then he sneezed again—a louder and more influential Spanish sneeze. More straps became hangar-less.

"Move down," said a fat man, nudging a lean wife. "He's got it!" "He's got it!" echoed the word down the aisle. Just then the suspect snivelled—a snuffling, sniffing, suspicious snivel.

A pretty girl on the seat facing him looked up from her volume of "Locked in Love." She leered at the suspect and the suspect sneered at her.

Then she turned the page to Chapter Four, while the suspect speculated three lines further on sport. Suddenly he bent forward and sneezed again.

The pretty girl jumped up and ran for the door. Other passengers gasped for the open windows.

The suspect sat down. He spread himself over the wide range of empty seats. Then he looked up into the face of a terrified conductor. "It's enough to drive everybody out of the car, isn't it?" he growled, "the way that girl put on sash and powder?"

THE most popular Legionaire in New York was he who entered the lobby of the Equitable building at lunch hour the other day. Some dozen or more girls approached him.